

REMARKS/ARGUMENTS

This application has been carefully considered in light of the Examiner's Office Action dated January 30, 2007 (the "Office Action"). Reconsideration and allowance are respectfully requested in view of the following.

Summary of Rejections

Claims 1-2, 4-6, 10-20 and 29 were pending at the time of the Office Action.

Claims 1, 2, 4, 6-10 and 29 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,974,237 to *Shurmer et al.* ("*Shurmer et al.*").

Claims 5 and 12-19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Shurmer et al.*

There was no express rejection or discussion of claim 20. There was no express rejection of claim 11, but it was mentioned in Examiner's discussion of the §102(b) rejection.

Summary of the Response

Claims 1, 10, 12 and 29 are amended.

Summary of Claims Pending

Claims 1-2, 4-6, 10-20 and 29 are currently pending in this application.

Applicants hereby request further examination and reconsideration of the presently claimed application.

I. The 35 USC Section 102(b) Rejections

Pending claims 1, 2, 4, 6-10 and 29 stand rejected under 35 USC § 102(b) as being anticipated by *Shurmer et al.*, (U.S. Patent 5,974,237). Examiner responded to claim 11 in addition to the claims cited above. Examiner also responded to claims 7-9 that were previously canceled. Consequently, Applicants presume that Examiner intended to reject claims 1, 2, 4, 6, 10, 11 and 29

over *Shurmer et al.* under 35 USC §102(b). Applicants respectfully traverse this rejection. According to MPEP § 2131, “[a] claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” Applicants submit that *Shurmer et al.*, fails to teach each and every element as set forth in independent claim 1, and consequently fails to anticipate claim 1.

Applicants’ claim 1 was previously amended with the Request for Reconsideration filed January 3, 2007 (the “RCE”) to include the downloadable applet recited in the original claim 9. Claim 1 is again amended herein to clarify that Applicants’ downloadable applet is configured to measure the data transfer rates between a remote client and a network gateway. Claim 1 now describes:

1. A service node for coupling a remote client to a network having at least one server, said service node comprising:
 - a) a gateway configured for connection to a network;
 - b) a switch configured for connection to a remote client;
 - c) a data routing system extending from said switch to said gateway, said switch, data routing system and gateway collectively forming a path, through said service node, configured for coupling said remote client to said network;
 - d) a bandwidth measurement device coupled to said gateway, said bandwidth measurement device configured for independently determining upload or download data transfer rates of data packets transferred between said remote client and said gateway, and for distinguishing the upload or download data transfer rate between the remote client and the gateway from the upload or download data transfer rate between the remote client and the network;
 - e) a measurement application resident on said bandwidth measurement device, said measurement application determining said upload or download data transfer rates for said bandwidth measurement device; and
 - f) an applet maintained by said measurement application suitable for download to said remote client; configured for independently determining upload or download data transfer rates between said remote client and said gateway, wherein, if determining said upload data transfer rate between said remote

client and said gateway, said downloaded applet generates said data packets originating at said remote client and, if determining said download data transfer rate between said gateway and said remote client, said downloaded applet determines said download data transfer rate based upon an analysis of said data packets generated by said measurement application upon arrival at said remote client.

As the title implies, *Shurmer et al.* teaches a self contained “communications network monitoring” system. As noted at column 1, lines 25 to 43 and elsewhere throughout, *Shurmer et al.* is designed to identify congestion or other problems in specific upstream network nodes. It is a diagnostic tool for network trouble shooting. It is not an apparatus for measuring downstream data transfer rates with a remote client station. Applicants measure upload or download data transfer rates actually present at a remote client device and distinguish that data transfer rate from the data transfer rate available at the gateway to an external network.

Shurmer et al. do not teach or suggest “an applet maintained by said measurement application suitable for download to said remote client”

Applicants note with appreciation Examiner’s statement at page 4 of the Final Office Action dated October 6, 2006 that *Shurmer et al.* “do not explicitly disclose an applet on the client...” Accordingly, previously amended claim 1, which **does include** such an applet, is not anticipated by *Shurmer et al.* However, in the present Office Action dated January 30, 2007 in response to Applicants’ RCE, Examiner now asserts on page 5 that:

The claim term “applet” has been given the broadest reasonable interpretation that the examiner has interpreted as an application or program. *Shurmer et al.* disclose an application/program – ‘a program for operating the data monitoring apparatus’ (col 5, lines 39-40).

Applicants traverse this conclusion and respectfully submit that Examiner has misapplied column 5, lines 39-40 of *Shurmer et al.* The “program for operating the data monitoring apparatus” of *Shurmer et al.* at column 5, lines 39-40 refers to a “memory 27” that stores, among other things, “a program for operating the data monitoring apparatus.” Memory 27 resides on the

server processor station 20 of Figure 2 and provides control functions for that server. Applicants' claim 1 recites: **"an applet maintained by said measurement application suitable for download to said remote client."** *Shurmer et al.* has no counterpart to Applicants' applet.

Shurmer et al. do not teach or suggest a remote client.

Shurmer et al. Figures 1-3 disclose a **separate** client side memory 33 that controls a data processor 32 in client station 30 (column 6, lines 27 to 38). This memory 33 is not "suitable for download to said remote client." It is a separate memory and control application entirely. *Shurmer et al.*'s client merely displays data collected by *Shurmer et al.*'s communication network monitoring apparatus 4. *Shurmer et al.*'s "client" is a local work station for the monitoring apparatus. See *Shurmer et al.* Figure 1, elements 7 and 8; Column 5, line 17. It is not a remote client.

Shurmer et al. do not anticipate claim 1 because it fails to include all of claim 1's elements. Rejected claims 2, 4, 6, 11 and 29 all depend on claim 1 and include all of claim 1's elements. Accordingly, pending claims 1, 2, 4, 6, 11 and 29 are not anticipated by *Shurmer et al.* under 35 U.S.C 102(b).

II. The 35 U.S.C. Section 103(a) Rejections

Pending claims 5 and 12-19 of the RCE stand rejected under 35 USC § 103(a) as being unpatentable over *Shurmer et al.* as applied above. According to MPEP § 2142, three basic criteria must be met to establish a *prima facie* case of obviousness:

First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.

Similarly, the fact that the Examiner has the burden of proof with respect to the elements of the *prima facie* case of obviousness is also well defined in MPEP § 2142:

The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.

The distinction of independent claim 1 over *Shurmer et al.* is discussed above. Independent claim 12 has also been amended and now provides:

12. An intranet for providing on-demand Internet access to subscribers, said intranet comprising:

- a) a service node; and
- b) a plurality of subscriber terminals, each one of said plurality of subscriber terminals coupled to said service node by a corresponding xDSL line;
- c) said service node comprising:
 - i. a switch coupled to each one of said plurality of xDSL lines;
 - ii. a gateway coupled to the Internet;
 - iii. a data routing system extending from said switch to said gateway, said switch data routing system and gateway collectively forming a path, through said service node, for coupling each one of said plurality of subscriber terminals to the Internet; and
 - iv. a bandwidth measurement device coupled to said path, said bandwidth measurement device configured for independently determining upload or download data transfer rates between said gateway and requesting ones of said plurality of subscriber terminals which access said bandwidth measurement device, and for distinguishing the upload or download data transfer rate between the client and said gateway from the upload or download data transfer rate between the said requesting ones of said subscriber terminals and the Internet;
- d) a measurement application resident on said bandwidth measurement device, said measurement application determining said upload or download data transfer rates for said bandwidth measurement device; and

- e) an **applet** maintained by said measurement application **suitable for download to said requesting ones of said subscriber terminals**; configured for independently determining upload or download data transfer rates for said requesting ones of said subscriber terminals, wherein, if determining said upload data transfer rate between said requesting ones of said subscriber terminals and said gateway, said downloaded applet generates said data packets originating at said requesting ones of said subscriber terminals and, if determining said download data transfer rate between said Internet and said requesting ones of said subscriber terminals, said downloaded applet determines said download data transfer rate based upon an analysis of said data packets generated by said measurement application upon arrival at said requesting ones of said subscriber terminals.

Applicants respectfully submit that the cited references do not establish a *prima facie* case of obviousness as to the pending claims because the cited references fail to teach or suggest all of the claim limitations; there is no showing of the desirability of any modification to *Shurmer et al.*; and there is no reasonable expectation of success that *Shurmer et al.* could provide the elements set forth in Applicants' claims.

***Shurmer et al.* do not teach or suggest all of the claim limitations.**

Claim 12 has been amended to include elements corresponding to those discussed above in connection with the §102(b) rejection of independent claim 1. Independent claim 1 is discussed in detail above in connection with the rejection under §102(b). *Shurmer et al.* is the only reference applied against the claims under §103(a). As noted above, *Shurmer et al.* do not teach or suggest each of the elements of the presently pending independent claims 1 and 12 for the reasons discussed above. Specifically, *Shurmer et al.* do not teach or suggest Applicants' downloadable applet, nor does *Shurmer et al.* teach or suggest the measurement of data transfer rates present at a subscriber terminal or remote client.

Shurmer et al. does not teach or suggest the desirability of Applicants' embodiments:

As noted in greater detail above, *Shurmer et al.*, disclose a real-time network node monitoring system. *Shurmer et al.*, is configured to monitor multiple network nodes and other network equipment to determine service issues with specific pieces of equipment or equipment links. See *Shurmer et al.* abstract; Col 1 lines 47-52; Col 4, lines 59-63; and Figures 1 and 4.

Conversely, Applicants facilitate an on-demand measurement of the network data transfer rate provided to a network subscriber terminal or remote client, for example the PC of an ISP customer, by passing data packets on demand between the network service node and the remote client.

Shurmer et al. do not directly monitor data traffic between a network subscriber or remote client and a network gateway, nor do they distinguish the bandwidth between such a client and a network gateway from the bandwidth between the client and the network as a whole. As noted in greater detail above, *Shurmer et al.*'s "client stations" are the network operator's monitoring console(s). They are not remote network clients or subscriber terminals. See Figure 1, elements 7 & 8 and Figure 4. Consequently, *Shurmer et al.* does not teach or suggest a connection between an external network and a subscriber terminal for a network service, nor can it measure the bandwidth between a network gateway and such a subscriber terminal.

This deficiency in *Shurmer et al.* is not trivial. It is common for an internet service provider ("ISP") to rate an internet connection in terms of a separate download and upload bandwidth. The customer of such an ISP would be unable to verify the bandwidth of his subscriber terminal through the use of *Shurmer et al.* *Shurmer et al.* would only reveal the bandwidth of the upstream network nodes to a network technician.

Shurmer et al. do not have a reasonable expectation of success in accomplishing Applicants' data transfer rate measurement for a subscriber terminal.

Shurmer et al. does not attempt to perform Applicants' data transfer rate measurements at the subscriber terminal or remote client level. *Shurmer et al.* only measure upstream network node performance. *Shurmer et al.* teach a stand alone network monitoring apparatus. Applicants teach the use of a downloadable applet for a remote client that is maintained by a bandwidth measurement device coupled to the network. *Shurmer et al.* and the Applicants have fundamentally different objectives. *Shurmer et al.* do not have a reasonable expectation of success in achieving Applicants' objectives, nor do they attempt to do so.

No prima facie case of obviousness of any of Applicants' pending claims.

Because the cited references fail to teach all of the claim limitations of claims 1 and 12, the Office Action has failed to present a *prima facie* case of obviousness with respect to these claims. Therefore, claims 1 and 12 should be allowed.

Furthermore, dependent claims 2, 4-6, 10, 11, 13-20 and 29 depend directly or indirectly from allowable independent claims 1 and 12, as amended, and incorporate all of the limitations thereof. Accordingly, for the reasons established above, Applicants respectfully submit that claims 1, 2, 4-6, 10-20 and 29 are not obvious in view of the cited references and respectfully request allowance of these claims.

No rejection of claim 20:

Examiner did not reject claim 20, nor did he indicate it was allowable. Claim 20 is a multiple sub-dependent claim that contains all of the elements of all of the intervening allowable claims 12 to 19. Accordingly, Applicants respectfully submit that dependent claim 20 is allowable over all of the rejections previously made by Examiner.

CONCLUSION

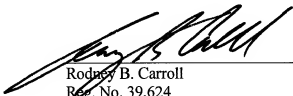
Consideration of the foregoing amendments and remarks, reconsideration of the application, and withdrawal of the rejections and objections is respectfully requested by Applicants. No new matter is introduced by way of the amendment. It is believed that each ground of rejection raised in the Office Action dated January 30, 2007 has been fully addressed. If any fee is due as a result of the filing of this paper, please appropriately charge such fee to Deposit Account No. 21-0765, Sprint. If a petition for extension of time is necessary in order for this paper to be deemed timely filed, please consider this a petition therefore.

If a telephone conference would facilitate the resolution of any issue or expedite the prosecution of the application, the Examiner is invited to telephone the undersigned at the telephone number given below.

Respectfully submitted,

Date: _____

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